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| 10/608,881  | 06/26/2003  | Shivaram Bhat        | 03226.497001;P9016  | 7839             |
| 32615   | 7590        | 09/01/2006           | EXAMINER            |                  |
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|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2162                |                  |

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/608,881 | <b>Applicant(s)</b><br>BHAT ET AL. |  |
|                              | <b>Examiner</b><br>Dennis Myint      | <b>Art Unit</b><br>2162            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07 July 2006 has been entered.

2. The amendment filed on 07 July 2006 has been received and entered. Claims 1, 9, 16, and 24 were amended. Claims 1-29 are pending in this application. Claims 1, 9, 16, and 24 are independent claims.

### ***Response to Arguments***

3. The applicant's arguments filed on 04 April 2006 have been fully considered but they are not persuasive.

In light of the amendments and referring to the Brun reference, Applicant argued that *Brun fails to disclose or suggest that the comparison between resources determines that one resource is a sub-resource of the other resource* (Applicant's argument, Page 9); *Brun does not disclose that comparison between resource identifier*

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*prefixes result in any type of relationship between resources, where the relationship is subsequently used to organize the resources in a hierarchical (Applicant's argument, Page 9); Even assuming arguendo that this is correct, Brun fails to disclose or suggest that the comparison of resource name prefixes results in one resource being a sub-resource of the other, and further that the sub-resource is placed in the NSAP hierarchical structure according to the relationship of the sub-resource and the parent resource (top-level resource) (Applicant's argument, Page 9); and Brun only discloses that the resource identifier prefix (i.e., the NSAP addressing scheme) is used to group together users with the same resource identifier types (Applicant's argument, Page 9).*

In response, it is pointed out that the rejection of claims 1, 3, 4, 8, 9, 11, 15, 16, 18, 19, and 23 are rejected under the *combination* of Sylor and Brun references. As such, both teachings of Sylor and Brun must be considered as a whole. In the first place, it is pointed out that Sylor teaches a hierarchy of resources (Paragraph 0049, i.e., *visual hierarchy*) wherein a resource is identified by a resource name (Paragraph 0064, i.e., *Properties of resource 24 include a name, a role*) and said resource hierarchy is embodied in a tree-based data model (Paragraph 0086-0087, i.e., *Tree Basis*; Paragraph). In said tree-based model, parent-child relations between resources are identified (Paragraph 0088, i.e., *logical hierarchy 30 can organize information into tiers, with parent-child relationships are based on dependency relationships 78*). Therefore, resources at lower levels (children) in the tree are sub-resources of the resources at higher levels (parents) (Paragraph 0088, i.e., *parent resource profiles 77 can provide to multiple child resource profiles 77, as with a server that provides multiple networked*

*services, while each of the networked services (for instance, DNS, file sharing, and network security) provides its features to multiple software applications).* This disclosure of Sylor clearly teaches a hierarchy wherein resources and sub-resources are organized.

In addition, Sylor teaches that resources are identified with a resource name (Paragraph 0064, i.e., *Properties of resource 24 include a name, a role*) and path-uniqueness of directed tree (i.e., said resource tree of Sylor) (Paragraph 0089, i.e., *the path-uniqueness of directed tree 39*). From these disclosures of Sylor, it is evident that resources and sub-resources are distinctly identified by resource name and path name in the tree hierarchy. It is well known in the art that path names in a tree hierarchy clearly identify which resource is parent (resource) and which resource is child (sub-resource). What Sylor does not explicitly teach is *comparing said names (either resource name or path names and employing delimiters in said name*. If path names of each resource in the tree hierarchy of Sylor are compared, said path names themselves would determine relationships between resources as parents (resources) and children (sub-resources) because path names in a tree hierarchy are unique and identify a node's parents up to the root.

However, Brun teaches comparing resource names (Page 1 Line-32-42, i.e., *comparing resource name prefix with the prefixes stored in an access border node directory*) to identify the relationship between them (Column 15 Line-35-57, Column 16 Line-30-50 and Column 19 Line-32 through Column 20 Line-45). Therefore, in the

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combination of Sylor and Brun teaching, comparing resource names (Brun) would identify relationships (Brun) as one resource being a sub-resource of the other (Sylor, i.e., parent and child in the resource tree of Sylor) and place the sub-resource in a hierarchical structure according to the relationship of the sub-resource and the parent resource (top-level resource) (Sylor).

In the prior office actions, NSAP and E. 164 as taught by Brun is pointed to in order to emphasize the fact that not only Sylor teaches a hierarchy of resources but also Brun teaches said hierarchy of resource. Put in a nutshell, Sylor *in view of* Brun teaches comparing resource names to identify resources and sub-resources in a hierarchy, which further refutes the Applicant's argument that *the comparison in Brun has nothing to do with the addressing schemes disclosing in Brun, and therefore, cannot possibly place resources amongst which a resource/sub-resource relationship is identified within the hierarchical structure of the NSAP or similar addressing scheme* (Applicant's argument, Page 10).

Additionally, referring to dependent claims 2, 10, 17, 24, 5, 6, 13, 20, 21, 25, 26, 7, 14, 22, 27, 28, and 29, Applicant argued in effect that because Sylor in view of Brun fails to render the independent claims of 1, 9, 16, and 24 obvious, said dependent claims should be allowable (Applicant's arguments, Page 11-14). Since Sylor in view of Brun does teach the limitations of independent claims, 1, 9, 16, and 24, said argument are not valid and said dependent claims remain rejected.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 1, 3, 4, 8, 9, 11, 15, 16, 18, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saylor et al., (hereinafter "Saylor")(U.S. Patent Application Publication Number 2002/0186238) in view of Brun et al., (hereinafter "Brun") (European Patent Application EP1009130A1).

Referring to claim 1, Saylor is directed to a system and method for managing resources and teaches the limitations:

"accessing a list of resources, wherein a resource comprises an object defined by a service type" (Paragraph 0049, i.e., *visual hierarchy derives from a logical hierarchy containing resources in dependency relationship with one another*; Paragraph 00663, i.e., *Conceptually, resource 24 is a placeholder for a wide range of things: usually, it performs a function*; and Paragraph 0051, i.e., *Resources include hardware, applications, services, business processes, organizational structures....*) and "wherein a resource is identifiable by a resource name" (Sylor, Paragraph 0064, i.e., *Properties of resource 24 include a name*);

"relationship determines that the second resource is a sub-resource of the first resource" (Paragraph 0088, i.e., *logical hierarchy 30 can organize information into tiers, with parent-child relationships are based on dependency relationships 78*. Therefore, resources at lower levels (children) in the tree are sub-resources of the resources at higher levels (parents) (Paragraph 0088, i.e., *parent resource profiles 77 can provide to multiple child resource profiles 77, as with a server that provides multiple networked services, while each of the networked services (for instance, DNS, file sharing, and network security) provides its features to multiple software applications*). This disclosure of Sylor clearly teaches a hierarchy wherein resources and sub-resources are organized.); and

"representing said first and second resources in a hierarchical organization reflecting said relationship, wherein said hierarchical organization comprises a top-level resource name and a plurality of sub-resource names corresponding to said top level resource name, wherein said plurality of sub-resource names comprises said top level



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resource name and an additional name portion separated from said top-level name”

(Paragraph 0049-0050, i.e., *logical hierarchy*; Paragraph 0088, i.e., *logical hierarchy 30 can organize information into tiers, with parent-child relationships are based on dependency relationships 78*; Paragraph 0088, i.e., *parent resource profiles 77 can provide to multiple child resource profiles 77, as with a server that provides multiple networked services, while each of the networked services (for instance, DNS, file sharing, and network security) provides its features to multiple software applications*; and Paragraph 0089, i.e., *the path-uniqueness of directed tree 39*). Note that in the said hierarchical tree of resources (logical hierarchy of Sylor), parent nodes bear are top-level names and child nodes bear sub-resource names to conform to path-uniqueness of a directed tree and that it is well known in the art that a path-unique name of a tree comprises name of parents up to the root and name of child (i.e., top-level resource name and additional resource name) delimited by a slash.

Sylor does not explicitly teach the limitations: “comparing a first resource name for a first resource to a second resource name for a second resource to identify relationship between said first and second resources wherein said relationship is based on said first resource name and said second resource name”; and “ by a delimiter”.

Brun teaches the limitations:

““comparing a first resource name for a first resource to a second resource name for a second resource to identify relationship between said first and second resources wherein said relationship is based on said first resource name and said second resource name” (Page 1 Line-32-42, i.e., *comparing resource name prefix with the*

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*prefixes stored in an access border node directory*; Column 15 Line35-57, Column 16 Line-30-50 and Column 19 Line-32 through Column 20 Line-45. Particular note that the method and system of Brun is comparing "prefix" of a resource name to a with prefixes stored in an access directory name database (Brun , Column 1 Line-32-42). Also, Figure 9 of the specification of Brun discloses matching (comparing) prefixes of a resource name to other prefixes in order to identify relationship between resource names based on first resource name and second resource name. ); and

" by a delimiter" (Column 15 Line35-57, i.e., *Resource Identifier Type: this describes the addressing scheme used for this user (E.164, X.121, NSAP, )* . NSAP stands for *Network Service Access Point* and is one of two types hierarchical address and is defined in ISO/IEC 8348. Said NSAP and other addressing schemes such as E.164, X.121 all employ hierarchical name systems, wherein a top-level name and a plurality of sub-resource names corresponding said top level name are used. Said plurality of sub-resource names comprises said top-level name and an additional name portion separated from said top-level resource name by a delimiter (a dot).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the system and method taught by Saylor for managing resources with the system and method taught by Brun for managing distributed directory services and locating network resources so that the combined system and method would compare the name of a first resource and the name of a second resource to identify their relationship based on their names and represent them in a hierarchical organization reflecting the relationship, wherein said hierarchical organization would

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comprise a top-level name and a plurality of sub-resource names corresponding said top level name, wherein said plurality of sub-resource names comprises said top-level name and an additional name portion separated from said top-level resource name by a delimiter. One would have been motivated in order to *define a simple and effective method and system for locating a resource in large networks* (Brun, Column 8 Line-20-24).

Claim 9 and 16 are rejected on the same basis as claim 1.

Referring to claim 3, Sylor teaches the limitation:

"listing said resources in order according to their respective relationships (Paragraph 0137-01150, i.e., *Fishbone Hierarchy* ).

Claim 18 is rejected on the same basis claim 3.

Referring to claim 8, Sylor teaches the limitation:

"one of the first and second resources is identified as a sub-resource of the other" (Paragraph 0076-0090. Also refer to the response to the applicant's arguments above for this limitation.).

Claim 15 and 23 are rejected on the same basis as claim 8.

As per claim 4, both Saylor and Brun teaches the limitation:

"a resource name comprises a plurality of components, wherein one component is separated from another component by a said limiter" (Brun, Column 15 Line35-57, i.e., *Resource Identifier Type: this describes the addressing scheme used for this user (E.164, X.121, NSAP)*). NSAP and other addressing schemes such as E.164, X.121, as disclosed by Brun , all employ hierarchical name systems, wherein a top-level name and a plurality of sub-resource names corresponding said top level name are used and said plurality of sub-resource names comprises said top-level name and an additional name portion separated from said top-level resource name by a delimiter (*a dot*). In addition, Saylor also taught the said limitation (Paragraph 0089, i.e., *the path-uniqueness of directed tree 39*). Note that in the said hierarchical tree of resources (logical hierarchy of Saylor), parent nodes bear are top-level names and child nodes bear sub-resource names to conform to path-uniqueness of a directed tree and that it is well known in the art that a path-unique name of a tree comprises name of parents up to the root and name of child (i.e., top-level resource name and additional resource name) delimited by a slash.

Claims 11 and 19 are rejected on the same basis as claim 4.

6. Claim 2, 10, 17, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saylor in view of Brun and further in view of Ramamoorthy (U.S. Patent Application Publication Number 2004/0213258).

Referring to claim 2, Sylor in view of Brun teaches the limitation:

"a request identifying a resource" (Sylor , Paragraph 0137—0147) and locating said resource in said hierarchical organization" (Sylor , Paragraph 0137—0147).

Sylor in view of Brun does not explicitly teach the limitation: "to determine whether said resource is subject to a policy definition governing access to said resource".

Ramamoorthy teaches the limitation:

"to determine whether said resource is subject to a policy definition governing access to said resource" (Paragraph 0018-0025). Ramamoorthy teaches a system and method for information technology management policies wherein resources are associated with access policy (Paragraph 0018-0025) and requestors are inherently checked for access privileges (Ramamoorthy, Paragraph 0036).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art combine the system and method taught by Sylor in view of Brun as applied to claim 1 with the system and method taught by Ramamoorthy for associating access policy with computing resources so that the combined system and method would receive a request for a resource, locates the resource in the resource hierarchical structure, and determines if the resource is subject to an access policy. One would have been motivated to do so simply because access to computing resources should be restricted using access policies for security concerns.

Claim 10, 17, and 24 are rejected on the same basis as claim 2.

7. Claim 5, 6, 12, 13, 20, 21, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylor in view of Brun and further in view of Carmel et al. (hereinafter "Carmel") (U.S. Patent Application Publication Number 2004/0128615).

Referring to claim 5, the system and method of Sylor in view of Brun does not explicitly teach the limitation: "receiving information identifying what is used as said delimiter".

Carmel teaches the limitation:

"receiving information identifying what is used as said delimiter" (Paragraph 0041-0043 and 0047-0048, i.e., *predefined context delimiter*). Carmel et al. teaches a system and method for indexing and querying documents wherein context delimiters are used for both indexing and querying into documents (Paragraph 0041-0043 and 0047-0048).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the system and method taught by Sylor in view of Brun as applied to claim 4 above with the system and method taught by Carmel et al. for indexing and querying into documents so that, in the combined system and method, comparing would comprise receiving information identifying what is used as the delimiter in resource names. One would have been motivated to do so simply to identify different components of the resource name.

Claim 12, 20 and 25 are rejected on the same basis as claim 5.

Referring to claim 6, Carmel teaches the limitation:

"receiving information for wildcard pattern matching of resource names"

(Paragraph 0049, i.e., *wildcard query*).

Claim 13, 21 and 26 are rejected on the same basis as claim 6.

8. Claim 7, 14, 22, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saylor in view of Brun and further in view of Shrader et al. (hereinafter "Shrader") (U.S. Patent Number 6026440).

Referring to claim 7, the system and method of Saylor in view of Brun does not explicitly teach the limitation: "receiving information indicating whether a resource name is case-sensitive".

Shrader teaches the limitation:

"receiving information indicating whether a resource name is case-sensitive"

(Column 9 Line-55 through Column 10 Line-22, i.e., *not case sensitive*). Shrader et al. teaches a system and method for web server account management wherein threshold keywords are indicated whether they are case-sensitive or not (Column 9 Line-55 through Column 10 Line-20+).

At the time the invention was made, it would have obvious to a person of ordinary skill in the art to add the feature of identifying whether keywords/names are case-sensitive or not as taught by Shrader et al. to the system and method taught by Saylor in

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view of Brun as applied to claim 4 above so that, in the resultant system and method, comparing would comprise receiving information indicating whether a resource name is case-sensitive or not. One would have been motivated to do so simply for better identification of resource names.

Claim 14, 22 and 27 are rejected on the same basis as claim 7.

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylor in view of Brun and further in view of Ramamoorthy and further in view of Cheng et al., (hereinafter "Cheng") (U.S. Patent Number 5544322).

Referring to claim 28, Sylor in view of Brun and further in view of Ramamoorthy does not explicitly teach the limitation: "forwarding the request identifying the resource from a first policy decision point to a second policy decision point for evaluation".

Cheng teaches the limitation:

"forwarding the request identifying the resource from a first policy decision point to a second policy decision point for evaluation" (Column 6 Line 65-67, i.e., *sent to policy server*). Cheng et al. teaches a method and system for policy-based authentication wherein a request for access could be referred to another policy server for evaluation (Column 6 Line 65-67).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of referring requests for access to another policy server as taught by Cheng et al. to the method of Sylor in view of Brun and



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further in view of Ramamoorthy so that, in the resultant method, the request for resource would be forwarded to another policy server (a second decision point). One would have been motivated to do so in order to provide a client "an authentication path that complies with both server's policy and the client's policy (if such a path exists)" (Cheng et al. Column 2, Line 45-48).

10. Referring to claim 29, Official Note is taken that the use of a cache for subsequent requests/processes is notoriously well known in the art.

### **Conclusion**

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows.

U.S. Patent Number 5434974 (Loucks et al.,)

U.S. Patent Number 5850511 (Stoecker et al.)

U.S. Patent Application Publication Number 2004/0267749 (Bhat et al.,)

U.S. Patent Application Publication Number 2004/0103170 (Borzilleri et al.)

### ***Contact Information***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Myint whose telephone number is (571) 272-5629. The examiner can normally be reached on 8:30AM-5:30PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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